**Activity 3**

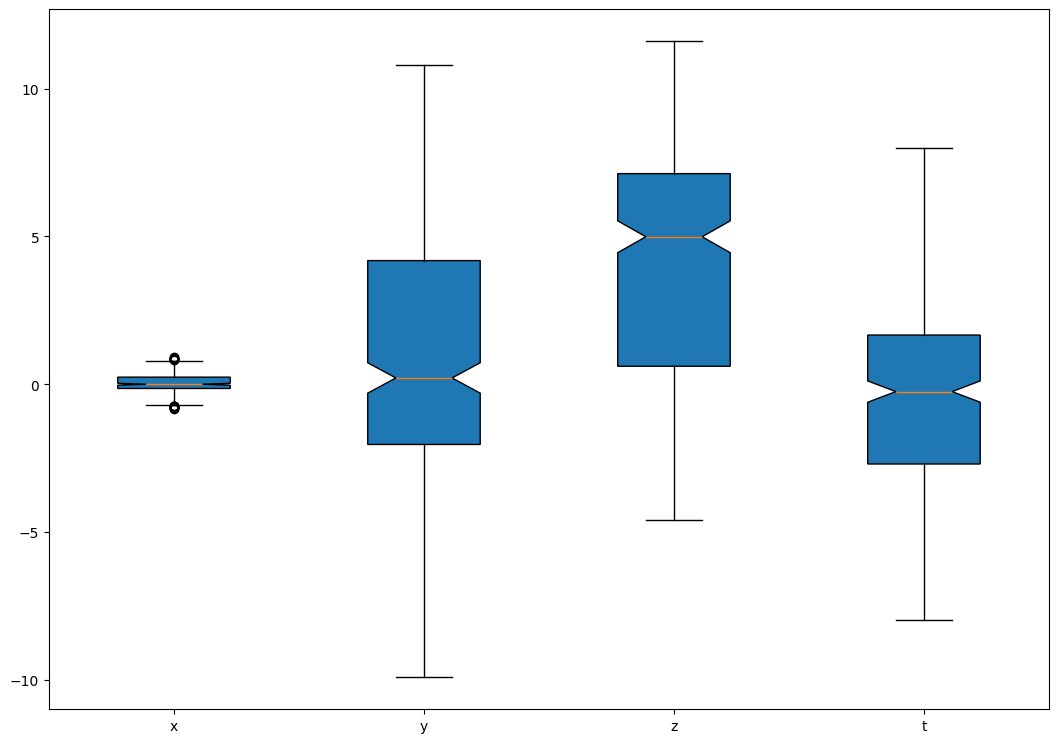
**Unsupervised-learning**

* **Git Repository**

<https://github.com/YoussefEzz/Unsupervised-learning>

* **Part 1 : Selecting and analyzing the datasets**

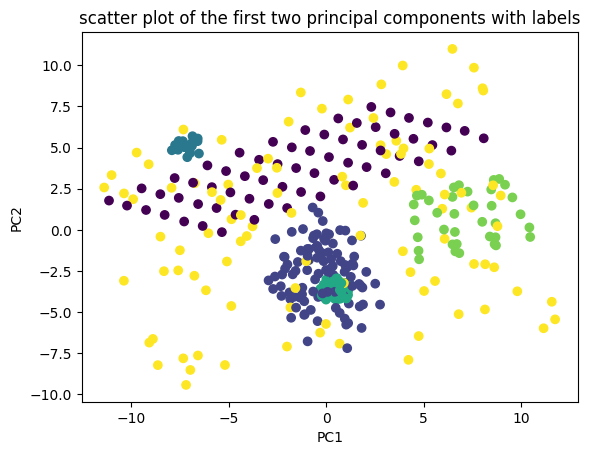
1. **A3-data.txt analyzed and preprocessed in A3-data.ipynb**
2. **Features**: 4 variables(**x**, **y**, **z**, **t**) of type float, 1 class of type integer(labels 1 : 5)
3. **Patterns**: 360 patterns



* **Part 2: Comparing unsupervised learning algorithms for A3-data.txt**

1. PCA analysis

a colored scatter plot of the first two principal components



Scree plot of explained variance and no. of principal components

